

Elixir Energy

ASX ANNOUNCEMENT

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HYDROGEN PROJECT PROGRESSES

HIGHLIGHTS

- MOU executed with Mongolia's Ministry of Energy to cooperate over hydrogen
- Independent analysis indicates very high quality of South Gobi renewables
- The combined wind and solar capacity factor is exceptionally high
- This is highly supportive of Elixir's complementary hydrogen strategy

Elixir Energy Limited ("Elixir" or the "Company") is pleased to provide an update on progress being made in its recently announced complementary hydrogen project.

Mongolia's Ministry of Energy and Elixir have recently executed a Memorandum of Understanding (MOU) which provides an initial framework for the parties to mutually investigate opportunities to create a new hydrogen industry in Mongolia. This Ministry is responsible, inter alia, for *"Maintaining security, stability and efficiency in the energy sector [and] developing a new source of energy"* (emphasis added).

Under this MOU, Elixir will seek to work with the Mongolian Government (and other emerging stakeholders) to bring forward Australia's cutting edge expertise in the nascent hydrogen economy in technical, legal, commercial and other areas.

Elixir has also recently commissioned an independent report from energy analyst K1 Capital to evaluate the wind & solar resource (and hence green hydrogen production) potential of the South Gobi region. To contextualise this for investors, the report compares these combined renewable resources to other proposed green hydrogen production areas in Australia.

The detailed report is available on the Company's website through the following link: https://elixirenergy.com.au/wp-content/uploads/2021/10/EXR20211007-renewables-comparison-v1.pdf

The report estimates a combined wind and solar utilization of ***79%*** for Elixir's project location. This compares to a number of locations in Western Australia as follows:

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Location	South Gobi	Southern Goldfields	Pilbara	Mid-West
Combined capacity factor	79%	~50-60%	~40-45%	~53%

A number of factors underpin the exceptionally high combined capacity factor in the South Gobi region, including: very high wind speeds; a diurnal wind profile that complements solar production; a cold climate supporting enhanced solar efficiencies; and, a seasonal profile that produces more wind in the less sunny months.

This combined capacity factor is one of the most important economic drivers for green hydrogen production. To simply illustrate, a location with a capacity factor of 79% will produce ~60% more hydrogen, *from the same capital investment*, than an area with a ~50% capacity factor. Green hydrogen production costs are heavily weighted to capital over operating costs.

The report is based on public data in all locations. Elixir is now harvesting detailed localized data for both wind and solar (to a bankable standard) using its SODAR equipment deployed in the South Gobi region.

Elixir's Managing Director, Mr Neil Young, said: *"We are very pleased to be working with the Mongolian Government to investigate the potentially world class green hydrogen potential of the country. The K1 Capital report supports our thesis that the South Gobi region of Mongolia has such potential – not only given its location immediately proximate to markets, but also its superb renewable resources. The wind and solar combination in our project area is as good as we have seen anywhere."*

By authority of the Board:

Neil Young - *Managing Director*
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